

The Aerospace Defense Command, as a component of the North American Air Defense Command, continues to defend the North American continent against any aerospace threat. This is being accomplished in spite of a diminishing force, aging equipment inventory, and the rising cost of defensive systems.

Our defenses are constantly being tested. How well we respond reflects directly on the credibility of our deterrent posture; for an adequate deterrence to aggression consists of the well known TRIAD plus ONE — or strategic offensive and aerospace defensive forces.

With fewer people to perform the mission of aerospace defense, it is essential that their talents be honed to keep them the professionals they are. "William Tell '72" provides the necessary opportunity for realistic training for pilots, maintenance crews, weapons controllers, and munitions loading teams. It is the proving ground for our aerospace defense network, and I can think of no better way to commemorate the Air Force's 25th Anniversary than this live fire competition among defenders of the North American continent.

Thomas K. McGEHEE Commander

Aerospace Defense Command



igh above the shores where Ponce de Leon once trod in search of eternal youth, twentieth century warriors spurred their shimmering stallions into the fray. Now the lists were 40,000 feet above the ground. Lances were replaced by ATR-2As, AIM-4Ds, -Fs, -Gs, and -As, and coats of mail were made of nomex when sixty of the continent's top fighter interceptor pilots and WSOs from twelve teams representing the Aerospace Defense Command, National Guard

That year, the subsonic F-86 Sabre, F-89 Scorpion, and F-94 Starfire were the mainstays of ADC and competitors in the meet. The contest accelerated greatly when it resumed in 1958 at its new home—Tyndall AFB, Florida — as the two-year-old F-102 Delta Dagger, first supersonic aircraft in the air defense inventory, entered for the first time.

The sleek, delta-winged and needle-nosed Daggers highlighted the "new" William Tell, which was

WILLIAM TELL 72 ... what it's all about

and Canadian Air Defence Forces, vied for top honors in William Tell from 18 through 29 September at Tyndall AFB, Florida.

Historically, the Aerospace Defense Command's William Tell aerial weapons meet began in 1954 as the air-to-air rocketry portion of the third annual U.S. Air Force Fighter Gunnery and Weapons Meet. ADC and Air Training Command (ATC) participated in that initial competition with the ATC team winning.

An ADC team from the Eastern Air Defense Force triumphed in 1955 by outshooting the ATC entrants in the final day of flying. Four overseas bases sent units to that meet, which included seven teams in all, giving air-to-air rocket firing a global nature.

Eastern Air Defense Force defended its championship successfully against worldwide challengers in 1956. Nine teams representing seven major air commands competed that year in the final rocket meet held in Arizona.

exclusively an air defense competition. The 1958 match truly reflected the air defense capabilities of the time. Radio-controlled Q-2A drone targets and an electronic scoring system marked the changes occurring in air defense. Drones replaced towed banners as targets. Weapons changed from machine guns and cannons to air-to-air missiles and rockets, with the Falcon missile and Genie rocket making their first appearance in the weapons meet. The competition was divided into three categories, acknowledging the differing capabilities of various types of aircraft. And for the first time, someone fired a perfect score the Florida Air National Guard team, flying F-86s.

The historic precedents of the 1958 meet stimulated competition in 1959, when 12 teams representing five major commands entered. So keen was this second competition at Tyndall AFB, that the winner won by a margin of only 100 points in the 6,000 point match.

The 1959 meet was a great one

for airplane buffs. On the meet flightline were the familiar F-89 and F-102, joined by two airplanes adapted to air defense uses — the F-100 Super Sabre and the swift, tiny F-104 Starfighter. The flying was described as the most realistic proving ground short of actual combat. Interceptors were scrambled day and night in all-weather conditions against targets flying at many different altitudes and speeds. Adverse weather was the rule, with nearly half of the missions flown underfoul weather conditions.

Air defense modernization was evident in the 1961 meet, an austere, business-like affair dictated by world conditions. The subsonic and adapted general-purpose aircraft had disappeared from the flightlines. In their place were three speedy, upto-the-minute jets designed expressly for the task of protecting the North American continent: the F-102, its newer sister the formidable F-106 Delta Dart, and the F-101 Voodoo. Ironically, these three stalwarts, so new 11 years ago, were still there this year -- still the most modern in ADC's inventory and the last fighters delivered to air defense squadrons.

The competition took on more realism in 1963, when William Tell added an "intruder" mission. A drone was launched from an unannounced point, and intercept directors had to hunt it, scramble their fighters and guide them to the target — all within minutes. The Air National Guard had begun flying more modern aircraft by 1963, and a team from Pennsylvania defeated the regulars to win the F-102 category. The F-106 winner was the 318th Fighter Interceptor Squadron, McChord AFB, Washington.

In 1965, the first entrant from another nation appeared, as Canada sent an F-101 team to participate in

what would be the last meet for five years. Sixteen teams entered, flying the F-106, F-102, F-101, and F-104. A team from the U.S. Air Forces in Europe brought international flavor as well, the 32nd Fighter Interceptor Squadron, Camp New Amsterdam, The Netherlands, won the F-102 category, controlled by a crew of Dutch intercept directors.

After a five year intermission imposed by the pressing demands of the Vietnam conflict, William Tell resumed in 1970. An austere meet,

1970 found three categories of aircraft competing: the F-106 Delta Dart, the F-102 Delta Dagger, and the F-101 Voodoo. The aircrew and ground crews of these aircraft represented ADC, the Air National Guard, and the Canadian Forces Air Defence Command.

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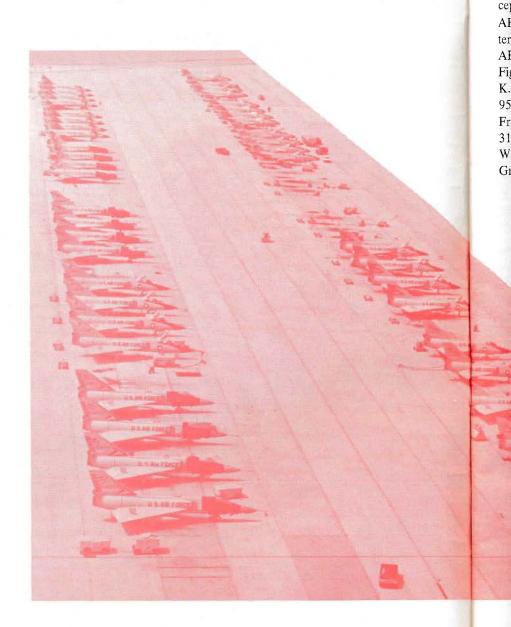
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Air National Guard teams from Fargo, North Dakota, and Duluth, Minnesota captured the trophies in the F-101 and F-102 categories with outstanding performances, while the 71st FIS, Malmstrom AFB, Montana, won the F-106 category.



In this year's meet the teams competed in three categories. In F-101s, Maine's ANG 101st Fighter Group, North Dakota's ANG 119th Fighter Group, and Canadian Defence Force's 425th Fighter Squadron from Bagotville, Quebec.

In the F-102 category; ADC's 57th Fighter Interceptor Squadron from Keflavik, Iceland; Vermont's ANG 158th Fighter Group and Wisconsin's ANG 115th Fighter Group.

In the F-106 category, six teams from ADC; the 2nd Fighter Interceptor Squadron from Wurtsmith AFB, Michigan, the 5th Fighter Interceptor Squadron from Minot AFB, North Dakota, the 87th Fighter Interceptor Squadron from K. I. Sawyer AFB, Michigan, the 95th Fighter Interceptor Squadron From Dover AFB, Deleware, the 318th FIS from McChord AFB, Washington, and 460th FIS from Grand Forks AFB, North Dakota.

Following its arrival at Tyndall

AFB, each team had two days to shake down and peak their airplanes before declaring them. Since the rules allowed only four aircraft to any surplus aircraft compete, brought in were flown off and aircrews were reduced by appropriate numbers to man the four remaining aircraft. In addition, the OPlan allowed two Weapons Directors (WD) plus two WD techs and thirty ground support personnel including the maintenance officer. Civilian technical representation was not allowed.

After the teams declared which planes they would enter, they had to use the four birds for the whole competition. Missiles were issued in advance of the competition to each squadron's missile maintenance crew. These missiles were prepared by the individual unit's missile crews and placed in sealed caskets marked with the squadron's desig-The missiles were then moved into storage until delivered to the aircraft. There the seals were broken by the load crews. ATR-2As were stored and maintained by Tyndall AFB personnel.

The rules of the competition covered the entire spectrum of the NORAD fighter operation from missile and rocket loading to ontime launch, recovery, and turnaround of the aircraft. Each of these events recognized team play rather than individual effort. Judges

graded weapons personnel not only on their proficiency in loading armament, but also on their tool kit quality and knowledge of the weapons through written testing. They graded each controller on control procedures, tactics, radio transmissions, and ability to direct the aircrews to an estimated time of arrival (tolerance plus or minus one minute). Aircrews were graded on airborne times, breakaway maneuvers, and profiles (flying each mission exactly according to the rules). A perfect flying performance could bring 14,800 points.

Missed distance was computed by MATTS/BIDOPS scoring only. Scope film was not evaluated except dry firing in ECM attacks. Front/ stern reattacks on the EB-57 were graded by awarding maximum points for a front MA, but still awarding points if the fighter successfully converted to the stern. All F-101s and F-106s flew their missions in the data link mode; the F-102s used voice control. Lead aircraft and crew flight lineups were rotated so that each aircraft and crew would fly in each of the four positions on a different mission in the meet.

High ranking experts from all agencies judged the competition under the direction of Major General Joseph L. Dickman, Deputy Director for Operations and Administration, Defense Nuclear Agency, Washington, D. C., who was the Chief Judge.

Their stories of success unfold in the following pages. All tell of hard work and esprit de corps. This, of course, was essential. However, each unit did one or two unique things to help pull them on top. Perhaps your squadron can adapt some of these "winning ways" which helped these "best of the best" in ADC's 1972 Tournament of Champions.

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SAFETY RULES

... the judge tells it like it is

o paraphrase the ubiquitous Howard Cosell's comments on the Olympics, the expertise and experience of the judges reflects the tone and quality of the competition almost as much as that of the contestants. In a William Tell competition each contestant has been briefed and rebriefed on the tactics, rules, and penalties until he becomes a self-styled expert on the name of the game. The people who plan sach contests are well advised to select judges who know just about all there is to know about the Interceptor/Weapons/Controller business. planners of William Tell '72 obviously chose well, and their selection of Chief Judge clearly shows their keen sense for the need to fill the judging team with only the most highly qualified people.

Major General Joseph Dickman, the Chief Judge at William Tell '72, can claim his entire operations/flying career in the fighter business. Sometimes with Recce, Fighter Bombers, or Fighter Interceptors, his "stick and rudder" experience goes back to the early days of World War II. As a Fighter Group and Wing Commander, Commander of an Air Defense Sector, NORAD/CONAD Region, and

First Air Force, as well as numerous Ops Staff positions including Deputy Chief of Staff, Operations, Headquarters Aerospace Defense Command, he knows the fighter business. His vast knowledge and experience have made him keenly aware of the role that safety plays in any effective flying operation. INTERCEPTOR wanted to know how the judges influenced the competitors in a contest where intense aerial competition and safety had to "live together." One day during a lull in the firing, General Dickman gave us his views on this sub-

INTERCEPTOR: Sir, do you feel it possible for the judges to adequately emphasize safety without detracting from the spirit of competition?

GEN DICKMAN: It's not difficult to emphasize safety, and safety doesn't have to detract from the competition. The way I look at it, William Tell was a competition based very much on complying with a set of rules. These rules were necessary to insure that everybody had an equal chance in the competition. Safety is *also* based on rules. To me it all goes hand in glove.

A comparison can be made with football. Football is very much

bound by rules — the position of players, what you can do before the ball is snapped, and so on. Safety is one reason for having rules in a body contact sport like football. Without rules the game would be senseless, without order or meaning, and dangerous. The same goes for other competitions. William Tell is rule-bound, necessarily, because it is the safest and fairest way to run a competition. So if you follow the rules, you're going to be safe.

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INTERCEPTOR: There would seem to have been more of a tendency for aircrews and weapons controllers to continue with their mission than there would be in a normal Weapons Verification Firing Mission. Did the judges take any specific steps to prevent teams from "pressing"?

GEN DICKMAN: There were very severe penalties for doing things unsafely. One just could not have "pressed" the limits — not complied with the rules — and gotten away with it.

INTERCEPTOR: The firing of live armament is more dangerous and hazardous than firing McDonnell Simulated Rockets (MSRs) and Weapons System Evaluation Missiles (WSEMs). But we all hoped

to have a safety record comparable to "dry firing" using simulators. Did you take any special precautions to keep William Tell safe from a weapons/munitions firing standpoint?

GEN DICKMAN: Every feature of William Tell that involved the firing of live armament was under very tight control. Starting out with the loadings, only the best qualified loaders in the whole command loaded the weapons to be fired. Each team went through intense competition at their home units before they were selected to come here. Here they were loading live armament every day. We knew it was a safe operation because these were the best qualified people who could be doing this.

Range safety, of course, involved many special precautions. Before each mission, aircraft and radar swept the range to ensure that no boats had strayed into the area. In addition, we had the range safety people in the control site watching BUIC and manual radar scopes. They were there entirely for the purpose of looking for unsafe conditions. They could have "skipped out" aircraft for a variety of reasons affecting safety. There was, in effect, a cone of authorized firing. The aircraft weren't permitted to fire if their heading was off 20° from the predetermined target heading. And obviously you weren't going to fire toward the land. But many special precautions in William Tell were related to live armament fire. That's the important difference in firing live armament compared with firing MSRs WSEMs.

INTERCEPTOR: Live armament is also used in Combat Pike. How was William Tell different from Combat Pike, from a safety viewpoint?

GEN DICKMAN: In Combat Pike you use basically the same procedures as in William Tell. They apply to both. I think the main difference in William Tell was the fact that rules violations could result in the loss of points. In fact, a serious safety violation could disqualify the whole team. Naturally, this was bound to weigh on any team member's mind if he was contemplating taking any action that might have been unsafe. In Combat Pike the pilot knows that there is nothing particularly at stake on any single mission. He can come back and fly it again tomorrow.

At William Tell the competition made a different situation. However, every pilot knew that if he took an unsafe action, and he was caught, he could have lost points—that would have dampened his enthusiasm. He would probably have had a bunch of other guys in his squadron very mad at him.

INTERCEPTOR: On what basis were point penalties meted out and were there provisions for more severe penalties for safety violations?

GEN DICKMAN: There were many provisions to subtract points, and some to disqualify teams. Any safety violation cost major points. For firing out of sequence you could lose 300 points. If the interceptors got closer than ten miles to each other on an ECM mission, for example, there was a 500 point penalty. We felt that that would have been quite dangerous. Any time anybody on the team fired without a clearance, the entire team got zero firing points for that mission. That was the most drastic penalty in the rules. How would you like to be the pilot who caused your team to lose 2,100 points because you fired before you were cleared? With competition as close as it was, your team might as well have packed and gone home.

The weapons loadings also had an emphasis on safety. For example, a nuclear safety violation was worth 250 points in the loading competition. All the teams were so close together on points that a 250 point penalty would have completely knocked them out of the running.

Finally, it might be worthwhile to mention a specific example where we took measures to ensure a safe operation for William Tell '72. One morning the first mission was on the runway getting ready to take off when the Weapons Center Command Post called and said that Safety had gotten word from the Search and Rescue people at Eglin AFB that a rescue mission was getting ready to take place momentarily, just under the target leg for a low altitude mission. Allegedly a small boat had been spotted about 20 miles off shore in distress. I guess the report had come in the night before. So, early in the morning, they had a chopper out to look for it. Although there was some confusion about the facts, we promptly cancelled the mission until they could get it sorted out. It turned out later that the boat was somewhere else and the cancellation was unnecessary, but we didn't know that at the time. We had to take prompt action and we did.

INTERCEPTOR: Did this cancellation cause a lot of people a lot of work?

GEN DICKMAN: Absolutely, and the mission had to be rescheduled. But it's good practice to keep in mind the old saying that safety is paramount. This was just one good example. When it came down to a question of making a quick decision, we made it on the side of safety.

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nytime anybody handles explosives, everybody from nuclear safety to explosives safety to ground safety is only too willing to come and inspect them. It seems like every inspection/assist -ance team which comes to a base wants to watch weapons load crews "do" a practice load. Then the crew can shoot for a perfect load — the load completed with no discrepancies. At William Tell, load teams actually compete against the clock and each other for recognition in a positive way. Load crews are an integral part of Wilevery procedure—even if it's not on the abbreviated checklist.

Before the actual loading competition begins, the judges give each crew written examinations. A crew can pick up as many as 300 points on this exam so the pressure is on before they ever get to the flight line.

Now at the plane the crew prepares the whole area for the timed portion of the event. The crew assembles at the rear of the plane and, after a short briefing by the judge, the time starts and the race is on. They start out with aircraft

prematurely or inadvertently fire some component in the rocket. It's one of many safety checks. With this completed, they go to the rocket inspection. They must make sure that it's serviceable and that nothing could prevent it from making a good launch. After they do that then they load the AIR-2A. After the rocket is loaded they go into what they call their loading completion phase. They remove the door locks, close the doors, clean up the area, go up to the cockpit one more time to check the switches and make sure they are properly

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COMPETITION BEGINS

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liam Tell competition and can add as many as 2,000 points to their team's total score. Not bad for 20 minutes work? Not so. These load crews are the best weapons loaders from each ADC unit competing in William Tell. It takes a lot of effort and practice to win even the local competition and, as in any competition requiring teamwork, it takes continual practice to keep that edge.

To the uninformed observer, a loading competition may look like four guys dashing through the drill of "throwing" missiles and rockets into a plane's belly as fast as they can without regard for caution and safety. They're moving fast all right; but safety procedures dominate the load competition.

Checklists are very much in evidence; the crew competing has one; each judge has one. The load crew has to know every step of

loading preparation. They check that the aircraft is set up — chocked, grounded, that safety pins and seat pins are installed, cockpit switches positioned correctly, and fire extinguishers available. They then go on to the AIR-2A rack. They've got ten items to check on the rack to make sure it's serviceable and would launch a reliable weapon. Next they check the four launchers to make sure that the missiles will launch, guide and The AIM-4 function properly. missiles are given a complete visual inspection to insure they are serviceable before being loaded on the aircraft launchers. After they are loaded, the launchers are checked for stray voltage and the igniter and power cables are connected between the launchers and the missiles. The next area is the rack voltage check. They check that there is no stray voltage that would

set, the switches requiring safety seals are safetied and sealed, and finally, police up the area. And that's all that's required. They reassemble at the tail of the plane and report, "Sir, the loading is complete." Hack. Now it's up to the judges. In this case time does tell. The judges then meet privately and discuss the discrepancies before totalling up the score...

Crews can move too rapidly or they can do some things with only speed in mind which would cause them to violate the safety rules. But, for the most part, they can be fast while being safe. On turnarounds, planes land, refuel, do everything in fifteen minutes. So obviously the bird can be loaded quickly, safely and reliably. But if we had a competition where there was no time limit, crews could go out there and fiddle with that piece for three hours. They

probably wouldn't make a mistake under a no time limit criterion, but they wouldn't be loading under realistic ADC conditions. Our mission is based more on turnarounds —second launch—and more. Load crews usually have more time to get loaded for the first go but from then on it is recover, reload, and launch. Even though they're loading rapidly, most of the crews violate very few safety rules. We wanted to know more about this "speed with safety" loading competition, so we questioned this year's loading competition judges.

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INTERCEPTOR: When you judged crews, did each step or operation have a specific value?

JUDGE: Yes and no. Each step doesn't have a specific point value per se, but there are four different methods of highlighting special features in the T.O. We have a step in the loading Tech Order which is an "Instruction." In the Tech Order each step is marked with "A", "B", "C", or asterisks. (This position can be aircraft crew chief or the alternate in this case.) If "B" is entered after a step, that means that this check is only done by the "B" man. So if the crew doesn't do the step or the wrong man does it, they lose fifteen points. Then the tech order has "Notes." A Note is an operating instruction, condition, etc., which is essential to highlight. If the crew violates a Note, it costs them fifteen points. Then there are "Cautions." A Caution is a procedure or practice which, if not correctly observed, could result in damage to or destruction of the equipment. That's fifty points. A "Warning" is an operating procedure or practice, etc., which, if not correctly observed, could result in personal injury or loss of life. If the crew violates one of those we stop the loading and they lose 1,500



Racing against the clock in the hot Florida sun, each team strained to complete their load fastest—without missing a step.

points. We also have special rules set up for the competition — if you violate any of these you lose fifteen points. A ground safety violation is fifteen points. A missile or explosive safety violation is fifty points. A nuclear safety violation is 250 points.

INTERCEPTOR: You determined a 20 minute load time. Was there an advantage to finishing in less than 20 minutes?

JUDGE: No. If they did it in ten they got the same number of points. Twenty minutes, in our experience, is an optimum time.

INTERCEPTOR: It was 23 minutes for the 101 wasn't it?

JUDGE: Yes. Because of the two AIR-2As they had to load.

INTERCEPTOR: How about if a team ran over 20 minutes?

JUDGE: Then it's one half a point penalty for each second over 20 minutes.

INTERCEPTOR: Did that include the written testing?

JUDGE: No, just the loading. Then there are 300 points for the test, and 200 points for the tool box inspection. So there are a total of 2,000 for the entire loading operation.

INTERCEPTOR: When did the timing begin?

JUDGE: The crew lines up the first time. At that time, they've been at the plane for an hour. They've looked the aircraft over, the weapons over, the missiles, the fire extinguishers and they say in effect, "Okay, as far as we're concerned it's ready to be loaded." Then we say, "Okay, we want to go in and check these items over to make sure." We do this because during the loading there are a lot of things that we can't see — umbilical plugs, etc. We check everything to insure that what they said was good, is in fact good. After that, we go back to the starting line. Then we start



Only if the alignment was perfect when they rolled the rocket into position could the crew expect it to quickly and smoothly lock onto the rack. Judges watched closely to see that each step was done perfectly.

the time from there. Again, even though the load crew checked everything, they have to do it over the way it's in the book. They've got to check everything again — fire extinguishers, grounding wires — the whole business.

INTERCEPTOR: Is there a mandatory sequence of events in the loading?

JUDGE: To a degree. There are obviously some things that are not. If you have one man doing everything, you could have a sequence. But we had four men working at one time. It's obvious that there are several sequences that they could use. And *how* they do their jobs isn't that important. But the tech order is divided into sections which must be completed in order. The

first section is called "Aircraft Loading Preparation" and the next section is called "Rack Preparation." They must have completed everything in this first section prior to starting on the second. If we didn't have some method of order, the load crews could find themselves in trouble. For example, loading the rocket before making the stray voltage check. But, within sections, there's no problem.

INTERCEPTOR: You mentioned that you added some criteria to William Tell that wouldn't normally be in the judging. Specifically what did you add?

JUDGE: Definite starting points and ending points. The book has a few "if applicables" such as "disconnect the power cable at load com-

pletion." We said that they didn't have to. The rules say that the Tech Order is based on certain conditions, whether the plane is going to fly immediately or just be on alert. We had to simulate certain conditions and one way we could do that was by putting it in the rules.

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INTERCEPTOR: Was there any difference between the criteria you used with ADC crews versus the ANG crews?

JUDGE: None whatsoever.

INTERCEPTOR: Was the two man policy necessary all the time? Even during the non-nuclear loading portion?

JUDGE: Yes, for the F-101 and F-106 when we used dummy nuclear weapons out there the two-man concept applied. But since the Deuces we had here didn't use nuclear weapons, the two-man concept didn't apply for their category.

INTERCEPTOR: Did each judge have a specific man? Did you watch the "A" man and somebody else watch the "B" man, etc.?

JUDGE: We tried to play a zone defense. I had one area at one time; somebody else had another area. If we tried to chase one guy constantly, we'd end up tripping over our feet.

INTERCEPTOR: Did the judges know all of the steps so they could tell just by watching if the crew missed one?

JUDGE: Yes.

INTERCEPTOR: Was there any interpretation of rules in your judging?

JUDGE: I guess there was a certain amount. Even if we didn't think he did but didn't know for sure, we couldn't judge it — we'd write that

we didn't know for sure. We had to be positive before we penalized. Most of these things are visual inspections — how do you tell if a guy visually inspects something? If he looked at it or near it, we had to say he inspected it.

INTERCEPTOR: Although speed is a major criterion, could you lose more points by being unsafe than by being slow?

JUDGE: The teams there lost more points by "caution" and "note" violations than by going overtime. In reality, they could be late a whole minute and not lose as many points as might be lost by violating a "caution". Being a whole minute late cost only 30 points, a "caution" costs 50. We considered safety first, then reliability and finally speed. It had to be in that order. To consider it otherwise was entirely out of the question.

These loads were under ideal conditions here. Under actual combat conditions these guys could be reloading in the middle of the night under the tension of an actual combat situation. What we hoped for here was efficiency although the emphasis appeared to be on speed. They were loading fast because they were so skilled. During our first loading competition, a couple of vears ago, we used the first competing team's time as the base time, and everyone was compared to that. We found that unrealistic. So we decided to use a base time of 20 minutes which we think is very realistic and seems to work quite well. I think we put safety, reliability and speed in the proper perspective.

INTERCEPTOR: Based on the loads you judged was there any correlation between speed and violations?

JUDGE: Most of the violations were against the slowest teams.

INTERCEPTOR: It just happened to be team technique?

JUDGE: What happens to these teams is that one little thing can go wrong — and then everything goes to pot on them. They get nervous, they forget things. When they drop out of their normal routine many things can happen to throw them off. Then they're out of their normal synchronization. Their timing gets off and they miss things that they should have gotten.

There's a great distinction in the winner being the best. You wouldn't think that as many times as those guys have loaded an airplane they would get nervous about it. They've not only got their bosses but their bosses' bosses outside the ropes watching them and on up to a major general. This doesn't happen in normal day-to-day practice. You can practice all day up and down, but you've got nobody watching you. But if you get a crowd . . .

"In any contest, a man competes only with himself because, no matter who or what his adversary, the true test is if he can reach deep within his own mind and body and find enough quantity and quality of that which is needed to win."



NOVEMBER 1972

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he "Firebee" is a jet-powered, high speed radio-controlled drone capable of evasive action at altitudes up to 50,000 feet. It is launched and controlled from ground sites and is recovered by a parachute and returned to Tyndall where it is "re-cycled" to fly again. Though not much bigger than a VW, it uses radar augmentation devices to make it appear on fighters' radar scopes like an enemy bomber. A Multiple Airborne Target Tracking System (MATTS) allows ground technicians to score proximity "hits" thus giving valuable scoring data without actually destroying the drone.

TDU-25B

Trailing on a cable some 26,000 feet behind its F-101 "Tractor," this target uses a propane burner to emit an infrared heat source simulating a jet engine tailpipe. Fighters attack from the stern using IR missiles. It simulated a low altitude target during William Tell '72.

EB-57

The EB-57 is specially equipped with Electronic Countermeasures

and chaff dispensing equipment. It is one of the most difficult targets. Aircrews must overcome intensive jamming and confusion devices to score a successful simulated kill. Attacks were assessed by scope film or NADAR interpretation — live armament was not fired at the aircraft.

Interceptor aircrews flew the following missions. They received 500 points for each successful Area 1 hit with a rocket or direct hit with a missile.

Profile I: The target was a BQM-34A drone at 45,000 feet. F-101 and F-106 aircrews had to intercept the drone, using front snap up tactics, and fire a rocket or missile. F-102s made co-altitude front attacks.

Profile II: A TDU-25B was towed approximately 3,000 feet above the surface. The aircrews had to discriminate the target from the "clutter" on their radar scopes, and fire an IR missile in a stern attack.

Profile III: The BQM-34A was positioned at 40,000 feet.

Teams had to intercept and shoot at the target head-on in a front attack, convert to the stern and fire a missile.

Profile IV: The Target was an EB-57, flying at varying altitudes, emitting ECM and chaff. The Weapons Director determined the tactics after taking a height "cut" to measure the target's altitude. If the target was above 10,000 feet, the WD ordered the aircrew to a front attack. If the aircrew missed the simulated kill on the front, they had the option of making a stern conversion. Aircrews got full credit for a successful front attack but lost 200 points if they had to reattack.

If the controller "cut" the EB-57 below 10,000 feet, he ordered the team to stern attacks only.

All profiles required contestants to intercept the target and fire at it within specified times, on specific headings and within the boundaries of the firing range. The entire team could lose all their points on that mission if one of their team members violated these rules or fired without a "clear to fire" from the Range Safety Officer.



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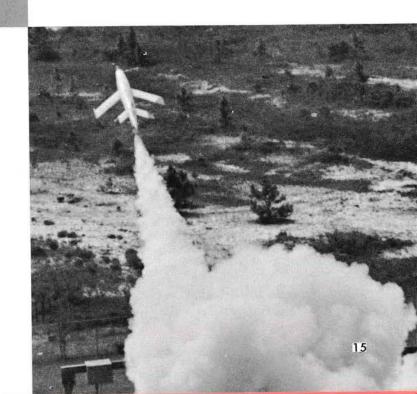
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NOVEMBER 1972





Happy Hooligans

The "Happy Hooligans" are the One-O-Winners for the second consecutive time. Standing (from left) are 1st Lt David L. Hiner, liaison officer. The WSOs; Lt Col William E. Phelan, 1st Lt Roger W. Olsen, Capt Thomas H. Polkinghorn, 1st Lt Terrence L. Thilmony and 1st Steve A. Brosowske. Kneeling (from left) the pilots; Capt Douglas L. MacDonald, Capt John R. Foyen, Major Wally D. Hegg, team chief; Capt Gary E. Kaiser and Capt Robert E. Carlson.



F-101 ... bappy booligans do it best--again

EXE USAIR FORCE

"Total cooperation from the people back home, that's the key to our success. If it were not for the extra work performed by the whole unit, we would not have had time to practice, we would not have been able to keep all the aircraft peaked up, and we could not have won. We could have brought any of the members of the home unit here, and the result would have been the same. It was a total Group effort all the way."

This is the way the "Happy Hooligans" of the 119th Fighter Group, ANG, Fargo, North Dakota, summed up their secret of success. And what success they had! For the second time in a row, the 119th FG finished first in the F-101 category at William Tell. Their load crew won the weapons loading

competition, one of their aircrews fired a perfect score, and the team compiled over 15,000 points. Every time a score was posted, the base rang with a new slogan that most were hard pressed to refute: "Two-Place Do it Better."

Major Wally Hegg, the team captain of the "Happy Hooligans" gave us a little insight into the selection of his winning team. Although he personally hand-picked his aircrews on a "best qualified" basis, he admitted the choice wasn't easy. He graciously conceded that the 119th had no greater pool of talent than any other unit, but he did seem confident that any team from his group would have been more than adequate to take top honors. Since the Hooligans won their competition in 1970, he de-

cided to share the experience by bringing a completely new aircrew team this year. Armed with one lieutenant colonel, four captains, and two lieutenants, Major Hegg again led his team against the best competition in North America—and won.

The Hooligans, like all of the teams in this meet, had to make personal sacrifices to participate. The aircrew team spent weeks practicing the special flight profiles and radio calls required by the William Tell rules. Since many of their members work other full time jobs, the task of scheduling time off for the practice and the two week trip was each man's personal responsibility. One of the pilots, an airline pilot, lost nearly \$1,000 in civilian pay during the meet; and

one of the WSOs, a school teacher, had to take a leave of absence from his classes to attend the competition. This type of personal dedication was all too typical among this team's members and all of the "citizen soldiers" that participated.

Any competitor knows the value of an effective "psy war" campaign and the Hooligans, past-masters in the art of one-upmanship, got everyone's attention their first hour at Although they couldn't flaunt their "Voodoo One-O-Wonder, 47 hours" patches like in '70, they merely parked their planes, put on their radome covers, closed the canopies — and left the ramp much to the amazement of the other maintenance teams who were working feverishly getting ready for the next day's practice mission. How's that for confidence in your maintenance?

When we looked into the maintenance side of the 119th FG team, we found ourselves looking up into a familiar face atop a big, broad While CMS set of shoulders. Nelson explained in a soft voice how he selected his maintenance team, we got the impression that he could have, if necessary, lifted a Voodoo onto his back and carried it down here from Fargo. The Maintenance team was nearly the same as he had brought here two years ago. As with most of the units, he had worked with his men for years, knew their capabilities, and had little problem finding a winning team. He even brought the same crew chief and aircraft (341) that had taken top gun honors in 1970; and, as if to prove this choice worthwhile, the aircraft flew and fired 100 per cent this year.

The experience that CMS Nelson brought this competition seemed to be a key factor in the maintenance portion of the meet. He used his support people (radio technicians, engine men, hydraulic specialists, autopilot specialists) as assistant crew chiefs on the aircraft. They inspected tires, moved chocks, and generally relieved the crew chief of these additional tasks so that he could get right into any maintenance problems on the aircraft. During each launch, he pre-positioned his mechanics and spare parts between the aircraft so that they would be available immediately if a starter failed or if an aircraft needed a tire change. He got a chance to prove the value of this procedure when his "star" Voodoo (ol' 341) "blew" a starter during a launch. Sgt Bergerson and Sgt McGuire changed it in two and a half minutes. The aircraft made an on time takeoff and flew a perfect mission.

The loading team from the 119th FG put the Hooligans into the spotlight early in the meet when they took the weapons loading honors. Sgt Terry Bartness told us that cooperation and teamwork, not just in the loading crew, but throughout the maintenance complex, was their secret to winning. Other members of their unit had helped with the team's normal jobs while they practiced their timing. As an example of the teamwork, he pointed out that SSgt Norman Paulson, of their team, was an augmentee loader whose normal job was in the engine shop. For a team that practiced in 50°F weather in North Dakota and then competed in 90°F temperatures in Florida, the practice paid off.

Loading and flying aircraft were the two main events in the competition. The Hooligans' overwhelming win in the flying phase came largely from the efforts of their GCI controllers. One wrong radio transmission or tactic selection and the mission would have been lost. Captain Jerry Pauls of Fortuna AFS, ND, explained how he and the only 2nd Lieutenant controller in the competition, Ken Durdaller, joined the Hooligan team. Since the 119th FG had won with controllers from the 780th ADG at Fortuna during the 1970 William Tell, they again requested controllers from this BUIC site. At the time of the request, according to Captain Pauls, the best qualified controllers and the only controllers were these same two guys. It wasn't much of a choice but it proved to be a very good one! These two men and their WD technicians had only one mission to practice at Tyndall before the live competition, but it must have been enough. They handled the restricted areas, the added safety radio transmissions, and the programmed confusion of the ECM targets and positioned their fighters right on the L. O. P. - right on! The 119th aircrews testified to the WDs' good work when they hung a sign in the "O" club: "Two-Place Plus a Controller Do It Best."

A few years ago a cartoonist drew a group of characters called "Happy Easter and his Happy Hooligans"; and by some quirk of fate, the character Happy Easter turned out to be a "dead ringer" for the commander of the 119th FG at that time. It didn't take long for the name to catch on. We have seen their name on aircraft, ground equipment, automobiles, windows, go-go dancers, and every base operations latrine mirror in the Air Force. Major Hegg said that this name was the best thing that ever happened to the 119th FG, and that every unit needs a morale gimmick like it. Well, gimmick or not, the Happy Hooligans came to William Tell 1972 to win; and, for the second time in a row, they did.



Hours before the aircrews arrived to fly their missions, the 119th maintenance team was on the flightline preparing the aircraft so the "shooters" could concentrate on centering the dot.

Trying to figure how the score keepers came out with a team total of "9" points is 2nd Lt Kenneth H. Durdaller, the only "brown bar" in William Tell '72. He and Capt (scoreboard was in error) Jerry Pauls, along with the Weapons Techs from Fortuna AFS, ND, directed the "Hooligans" to their second straight 101 Willy Tell victory.

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1972 William Tell winners in the F-102 category, the 115th Fighter Group, Wisconsin ANG. Four of the pilots (from left), Lt Col Phillip Brickson, Maj Allen Laquey, Capt "Skip" Foster, and Capt Dale Ebben, "daylight" as airline pilots. Only Maj Richard Manthey (far right), the spare pilot, is a full time Guard Technician.

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F-102 ... just another guard drill



We heard a lot of that from the Truax bunch after they won the F-102 phase of William Tell '72. And, when we first heard them say that, many of us allowed as how the fields must be mighty fertile in Wisconsin. INTERCEPTOR asked them how they could make such a casual remark after they had had to work so hard to win.

From the time the 115th Fighter Group won their regional competition, every member of the "Raggi Dieassm Ilitia" realized that to win at William Tell, they all would have to put up a really "good show" in every way. The Group had always pulled together on every big effort so this wasn't anything new.

Lieutenant Colonel Ronald Skinvik, the commander, decided from

the outset that his team would exemplify the finest attributes of the Air National Guard in general and the 115th in particular. Load the team with full-timers who had the most experience and had flown the most lately? Not Truax. The spare pilot was the only Air Technician the boss would allow on the flying team. They'd use him to help run the briefings. The rest were parttimers - airline pilots in civilian life. The maintenance and weapons loading team were men who had survived the same discriminating criteria. Colonel Skinvik knew that all his men were technically proficient so he looked for those who could best represent the Guard professionals — in appearance, attitude, skill and rapport.

He knew that the team would

need the *full* support of the *whole* group. He called everyone together and asked them what they thought of his choice of people. His query was answered with a standing ovation. Even the ones who *weren't* going to Tyndall were on the 115th Willy Tell Team — from the guy who centered the dot to the guy who cut the orders.

Okay they had a team. Now to make it a winner. Two months before the meet SMSgt John Bunch, the CAMRON weapons control and electronics supervisor, picked nine airplanes that had compiled a good performance record. He made an aircraft history notebook with a section for each of the nine planes. Before each mission the pilots who were flying any of these birds reviewed the commentary in the book.

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Following the mission they entered detailed descriptions of how the radar and fire control system performed on that mission. After two months of this, Sgt Bunch and his bunch had isolated just about every idiosyncrasy of the nine. It took a lot of the guesswork out of picking and "peaking" the best five.

From somewhere in the Group someone coined the phrase "Dress sharp, work sharp." It became the byword. Each team member bought red blazers, coordinated slacks and white shoes. The pilots bought red, custom fitted "social suits" and Supply issued brand new fatigues and brogans to each of the enlisted troops.

The pilots trained both in the aircraft and the simulators. They had the simulator technicians set up the William Tell profiles so they could get the "feel" of W-151 and W-470. When one considers that most pilots would rather miss William Tell than do *anything* in the simulator, their dedication was admirable. The philosophy was that the more they practiced William Tell at Truax, the more "routine" William Tell would be at Tyndall.

It was finally time to deploy to Tyndall. The 30 man maintenance team left Truax on Monday. There was a Division exercise Tuesday night — "the 115th will participate" — the inevitable 24-hour weather delay — then they flew twice Wednesday night - "the William Tell birds will participate." It was a clear night with no big crosswind problem but for some inexplicable reason, they scraped the tails of two of the "shooters" on the runway during recovery. That gave what was left of the maintenance guys at home something to do Thursday. The birds were leaving Friday morning. They got both tails fixed and the flying team departed Truax and arrived at Tyndall

on time.

The 115th knew that it would take more than bright red flight suits, blazers, and hundreds of RAM (an esoteric acronym containing a humorously derisive reference to the supposedly tattered appearance of many early American state militia) decals to win William Tell for them. But in a competition such as this, any psychological edge is a step toward victory. The "Raggi Dieassm Ilitia" arrived in style.

The meet started off rather badly for the troops from Truax. Their load crew came up two minutes overtime in the load competition. Maybe it was the 90+ degree weather, the large crowd of spectators, the tension of competition, or a combination of all these factors. Who can say? The only thing they knew for sure was that it wasn't a lack of preparation. All the other MMS guys who "took up the slack" while the team practiced can attest to that.

Their SAGE-experienced controllers, Captains Wally Wieters and Jim Lafferty, learned the BUIC system with judges, rather than instructors, looking over their shoulders. And to start the flying portion off with a bang, the second aircraft on their first mission lost its radio and most of its available points. From the first day the 115th had an uphill battle. Each time the pilots climbed into their cockpits the tension was high as the humidity.

As the competition continued, many men became overnight Wisconsin heroes. Two of these were MSgt Don Hill and TSgt Bob Doleman, who set what may be a world's record for changing an F-102 starter — 59 minutes flat.

When the last day of competition arrived, even James Snyder wouldn't have handicapped the outcomé of the Deuce competition. The 115th had one more sortie to go — the

one with all the marbles — win or lose. How do you guarantee that that one last, all-important mission gets off? Lieutenant Colonel Phil Brickson, the Team Captain, had a plan.

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He knew he had the Hill-Doleman Maintenance Team who could "build him a new airplane" in an hour. If they started up an hour early would they have enough fuel for the mission? Yeah, just enough. So Captain Skip Foster "cranked" an hour before takeoff time and, wouldn't you know it, everything worked perfectly. We're sure that the hearts of everyone who has ever sat on the ramp at Tyndall go out to Captain Foster, who sat there and held the brakes in the Florida sun. After sitting there in that heat contemplating that "make or break" mission for an hour, he should have changed his name from "Skip" to "Limp"! They sure have funny "Guard drills" in Wisconsin.

It seemed odd that after all the planning, preparation, practice, and competition, the whole tourney would rest on that last sortie.

"Off on time, target valid, clear to fire, MA" — and when he landed, the F-102 victory belonged to the RAM.

Then, after they had won and the perspiration had dried and smiles replaced the tense expressions, they could joke about how they "had it all the way."

The "just another Guard drill" bit? It turns out that the 115th tries to put out the max from the whole Group on everything they do — whether it be a Division exercise, an ORI, or a William Tell. "The more you prepare for the expected, the more you're prepared for the unexpected." No one really felt that Willy Tell was like anything else they had done. The missions resembled Combat Pike and they had felt excitement and tension

in ORIs, but nothing to this extent. So they prepared themselves for William Tell '72 as they'd prepared for other exercises. Sure they went at it more extensively and in more detail but Willy Tell was a "bigger deal."

No one wins or loses William Tell solely on what they do in that short preparation time just prior to the competition. A unit's ability

is sort of like a personality — an attitude. It takes years to build and no "bad break" is going to change the outcome if they have anything to say about it. The real winner prevails over the competition and "the breaks" with ability and desire. So it turns out that their preparation and planning for the things they expected at William Tell enabled them to react more decisively

when the unexpected happened. Thus they were able to come back from a slow start and finish the test on top. There's nothing really new about their efforts to win. The 115th prepared as they always do when they face a challenge — that's their "drill."

If they run all their "Guard drills" as they did at William Tell '72, they deserve to win.



. just another Guard drill. Captain "Skip" Foster is hoisted on the shoulders of his jubilant team mates after scoring the final "kill" which put the 115th in the winner's circle.

NOVEMBER 1972

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F-106... three ex-GIBs and an old deuce pilot





"You asked us how we won. I think the answer to this is that besides the fact that we brought top notch people down here, the top notch people back at Grand Forks did their homework before we came. That's why three of the airplanes went CODE ONE the whole time we were here — no maintenance required. The team back home was as much a part of William Tell '72 as any of us here. It was really their work that helped us win this competition."

This was the way Captain Dick Lambert summed it up for the 460th FIS team. er



The World Champions in the F-106 Category: (from left) Capt C. J. Nelson (spare), Capt Bob Jenkins, Capt Dick Lambert, Lt Col "Oley" Ohlinger (team captain), and Capt Pat Schauffele. Lt Col Ohlinger is modeling the latest in flying fashions, the "Flarelegged" flight suit.

The F-106 category competition was a close, hard-fought battle all the way to the last mission - by the last man. When the 460th finally emerged as the winners, their first words were about the outstanding maintenance and support personnel that made it possible. They talked of crew chiefs, fire control specialists, and load crew members at Tyndall and at Grand Forks — and a radar superman named MSgt Virgil Henley. We've got to concede that any time three of four F-106s can fly four consecutive CODE ONE missions, a lot of people performed a lot of tasks and performed

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them just right. There's no other way.

The pilots from this squadron were quick to point out their rather unusual background. All of them except the team captain, Lt Col Kenneth Ohlinger, (who has a long ADC history in the F-102 but little time in the F-106) were ex-GIBs (former back seat F-4 pilots). They indicated that a couple of years of flying with "old men" front seaters (their words) was great training for a single seat, do-it-all-yourself, aircraft like the F-106. The team composition must have been a perfect selection (FNGs take note). Re-

NOVEMBER 1972



One of the big factors in the William Tell competition was maintenance. The 460th proved their expertise when three of their four aircraft flew four all CODE ONE missions.

gardless of their background, these four pilots won a pressure-filled contest that was only decided when one of their pilots "splashed" the drone on the second shot of a rescheduled two-shot mission.

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The dominance of squadron grade officers on this team did not come. about by accident. After the 460th had won their regional F-106 competition and qualified to compete in William Tell 1972; their Air Division Commander, Major General Harrell, suggested a new idea for the team. If the talent was available, he would like to have a young team of lieutenants and captains, led by the Squadron Commander, compete and win the competition. Obviously the talent was available; they met the challenge and won. With "guidance" like that, what other outcome could there be?

Although much of the actual meet went smoothly for the 460th, the weeks leading up to William Tell were quite busy. The squadron had just returned from a deployment to Tyndall for Operation Combat Pike. This live firing mission was viewed by most of the pilots as both a help and a hindrance. While they were now familiar with the necessary safety radio calls for the firing range, they had little time to practice the required mission profiles.

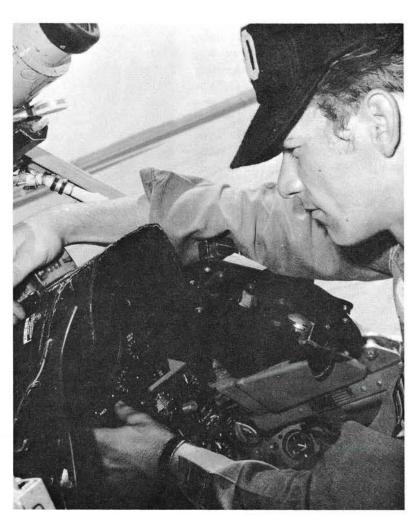
The squadron first met their team controllers, Captains Bill Miller and Jack Good, while at Combat Pike. During the two weeks available for practice, these two SAGE controllers went to a BUIC site to learn the system and control the squadron's practice sorties. Their practice was evident when they nearly "maxed" the score on the time compressed low profile mission. All four

26

pilots attributed their success in this mission to the efforts of these two men and their WD technicians.

We indicated before, the fine performance of three of the aircraft. But as if to keep the maintenance team alert, one aircraft would not cooperate. Captain Bob Jenkins, the pilot whose last mission decided the competition, found the road to victory anything but smooth. On his second mission, he started his aircraft and found the scope blank — no displays. Maintenance personnel removed and replaced his entire radar scope in just 17 minutes. He had just enough time to taxi and take off. The set performed perfectly in the air and he "splashed" the target. Again, on the last day, he had radar cooling problems. He fired a good missile, but lost points because he had to turn off his overheating radar. Between that flight and the afternoon mission — the last mission — maintenance again performed a major repair. Anyone who saw the aircraft lying in pieces on the ramp, would have thought that it would never fly again. They changed a cooling turbine in a little over two hours, put it back together and, on that afternoon mission, it scored two perfect hits. This type of support surely helps a pilot look good, and illustrates the team effort required to win.

After the fine effort by each member of the 460th FIS, we agreed to set the record straight. Although the squadron has many real "tigers," they certainly don't hide in "caves." The squadron motto "CAVE TIGRIM" translates into a warning: "Beware the Tiger." In view of their performance here, we feel that to be excellent advice.



When Capt Jenkins started his aircraft for the second mission, he had no scope displays. Sergeant Dennis Lampiasi and other members of the maintenance team changed an entire radar scope in 17 minutes. The aircraft took off on time and performed perfectly.

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hev never wear bright red flight suits, they don't have large patches with catchy sayings, and we've never seen a bumper sticker that alludes to their performance as anything beyond the normal. They quarterback the team, but seldom make the headlines. Pilots refer to them affectionately as Whetstone, Incognito, or Orphan

Who are they? They are the Weapons Directors and WD technicians who monitor the air battle and direct our interceptors to their qualified men in their field - and they proved it.

Each GCI team competed as members of a fighter unit. Their control usually spelled the difference between 25 points for an on-time takeoff and the opportunity for a fighter to score the maximum points for his mission. When their targets were declared "hot" (valid), they usually had only seconds to select a tactic and start their interceptors toward a firing position. If they delayed or made the wrong decision, the target would move out of the trol equipment and selected their tactics from experience rather than using the computer. All of these systems had inherent advantages and disadvantages. Had some of the controller teams been given their choice, they might have chosen the other guy's system. They were not given this choice. It was what you did with what you had that counted.

Captains John Kiely and Richard Smith, TSgt Art Gloster, and SSgt Mark McDonald, the winners of the F-101 Director Trophy, thought the competition here was excellent

CONTROLLERS ... they make it all happen

targets. In our day-to-day operations no interceptor pilot would consider an air defense system without their help. At William Tell, these men were an integral part of each fighter team.

The controller/technician teams that competed in this year's weapons meet had many different backgrounds. Some were SAGE controllers, some were working in BUIC sites, and some had spent all of their time with manual control equipment. A few of the GCI teams were co-located with their fighter squadrons, and therefore knew the pilots well. Other teams worked at remote sites and met their aircrews for the first time just before the deployment. The fighter squadrons picked some of the controllers, the Air Divisions selected others, and a couple came because they were the only ones available at their site. But regardless of their background, experience, or the selection process, the controller teams at William Tell 1972 had one thing in common: They were the best vulnerable area and their team would lose the points for the mission. During each sortie, judges stood behind them ready to subtract points for each mistake or irregular radio transmission. Even under these conditions many of the controller teams scored over 900 points of the 1,000 available. That's a great batting average in any league.

In addition to the overall competition, each controller team competed, in its category, for the Weapon Director Trophy.

Expert judges, many of them from the Interceptor Weapons School, evaluated the teams during each of the four profiles. While the flight profiles for the different aircraft were quite similar, the controllers' tasks were different. The F-101 and F-106 controllers used the BUIC system and directed their aircraft by Data Link communications. Two of the F-102 control teams used the BUIC computer, but controlled their pilots by voice transmissions. The controllers from Iceland used only the manual con-

and the competitors extremely well qualified. Kiely and Smith were members of the 101st FG, ME ANG. Their home is the BUIC site at Charleston Maine. Captain Kiely is an exchange officer from Canada, an IWS graduate, and was a controller judge during the Canadian "Call Shot" competition. Captain Smith, a former instructor at the Perrin AFB, GCI school, was also a very experienced competitor. According to the controllers, most of the honors should go to their WD "techs" because, "A controller is only as good as the technician that supports him." Kiely told us the hardest part of the meet for him was the radio discipline. "It was hard to keep your mouth shut! Although a voice transmission could sometimes save an intercept, you just couldn't say anything because it would cost the team points."

Although radio discipline was difficult for the F-101 teams, Captain Robert Peterson and Phil Szymkowics, MSgt William Showalter, and SSgt Jack Jackson, winners to h the tear sing trar files 1,0 ed

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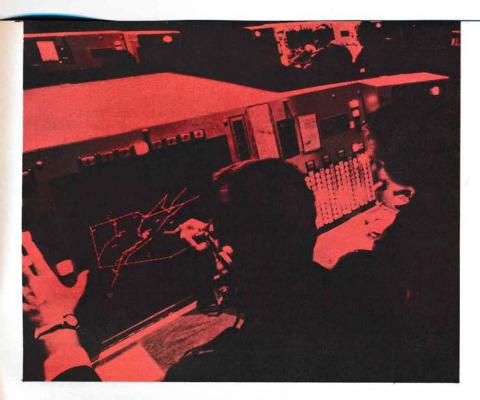
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Working in the "blue room" of the Tyndall BUIC site, controllers use the semi-automatic BUIC system to help solve their intercept problem. On most missions they had only seconds to select a tactic and start the interceptor toward a firing position.

ners in the F-102 category, seemed to have this problem solved. During the competition, the 57th FIS team from Iceland did not lose a single point for incorrect radio transmissions. In fact, on two profiles these controllers logged perfect 1,000 point scores, a feat unmatched by any other team. Their only tight spot came during the ECM mission when their fighters had to make "combat descents" from 30,000 feet to fire a frontal attack on a low target. The target was only 30 nm out at initial contact, and both the controllers and the pilots had to rush. Speed and precision was the secret of this competition and they had both.

The top controllers in the F-106 category overcame quite a few obstacles on their road to victory. Captains Craig Methias and Steve Janson of the 318th FIS team, McChord AFB, Washington, are SAGE controllers. With only a week and a half practice on the BUIC consoles before the meet; they and their WD Techs, Staff Sergeants Richard Tinley Robert Pecqueur, managed to out score other teams who normally

worked with the equipment. One of their methods for turning the odds in their favor was preplanning. Janson, an IWS graduate, and Methias, who had competed in the 1970 William Tell; compiled R/T checklists beforehand and used them on each mission. It was this standardization that helped them accomplish the impossible — a successful Data Link sortie without Data Link. Major Don Schick, one of their pilots, lost D/L at the beginning of his run, but when he began getting the standard "arm up" calls from Captain Janson, he surmised his position on the attack leg. He located his target, scored, and then flew the carefully prebriefed breakway. Neither the controllers nor the pilot had to break D/L silence.

Nobody knows how much we count on these guys until the chips are down and the targets are hot. Their outstanding skill and ability was tested once again at William Tell '72. It is fitting that their efforts could so affect victory or defeat. The same holds true in defending North America against attack.

NOVEMBER 1972

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TOP GUN

... they "brother-in-lawed" to win



Captains Lowell Butters (left) and Douglas Danko (right) express their delight after receiving the Top Gun Trophy from General McGehee at the William Tell awards banquet.

Anytime any aircrew comes out as the "Top Gun" during a weapons meet, we would expect to find the winners shoulder-deep in experience. Not so for the Canadian crew of Captains Lowell Butters and Doug Danko. As only five year veterans of the 425th "Allouettes" from CFB Bagotville, Quebec, these two overcame an obvious language barrier - "Ay" - - wool flying suits in 90° plus weather, and the pressure of numerous rescheduled profiles to take home the Thomas K. McGehee trophy and the "Top Gun" title.

What's really amazing about their achievement is that neither of them had ever fired live armament before, and the airplane, which had come from flyable storage at Davis-Monthan a few years back, had not fired since the 425th picked it up.

With only the ops order for preparation, a lot of enthusiasm, and "simulated" profiles at their home drome; they started off right at Tyndall by stuffing a missile into a TDU-25B low altitude IR target on the first mission.

But, after the first kill, there were seven more pressure packed missions where their failure or an MG-13 malfunction could have knocked them out of the limelight.

They'll remember that front-stern reattack, where they fired two perfect shots only to have the scoring system malfunction. They'll remember coming down the "pipe" on a front snap and not getting contact, and the relief when they found out that the TWT on the target wasn't working. They'll remember the eight break-locks on a B-57 making a hobby of stealing gates and spewing chaff all over the sky — and the dot in the hole a half a second before the "X."

They finally finished the last profile with a perfect score across the board only to find themselves tied with two other crews who had finished firing five days earlier. Now the shoot-off pressure really built up.

Scheduled as number three and armed with one AIM-4D they launched against a BQM-34A flying somewhere between 11,000 and 19,000 feet. The tactics, "by the shoot-off rules," required a short range commit against a target making up to 90° heading changes. By the time they were paired, the two shooters in front of them had narrowly missed the kill. Captain Danko got the lockon — but the overtake was 500 knots! Each time they tried to "cool off" the attack geometry, the target would fly off in a new direction. "We weren't sure how to play it," Danko later said, "I was hoping that Lowell would get an "eyeball on it." He finally did and got into the stern. Butters squeezed the trigger. The missile launched as the target began a turn. But the missile, as if it had a mind of its own - like it, too, was a part of the team - struck the drone and knocked off the

Talk about teamwork! Danko and Butters are brothers-in-law. They married sisters. They have only been flying together since May and, as mentioned before, have been in the Canadian Forces for only five years. Obviously the monastic, spartan life at Tyndall had its beneficial effects and allowed them to withstand the pressure.

AWARDS

... bere's what it's all about



Lt Gen Thomas K. McGehee (left) Commander, Aerospace Defense Command, presents the coveted Richard I. Bong Trophy to the three category winners of William Tell '72. Accepting the trophy are team captains from the winning fighter squadrons. They are (from left) Maj Wally Hegg, 119th Fighter Group from Fargo, ND (F-101); Lt Col Phillip Brickson, 115th Fighter Group from Truax, WI (F-102); and Lt Col Kenneth Ohlinger, 460th Fighter Interceptor Squadron, from Grand Forks, ND (F-106). The trophy was presented during the William Tell Awards Banquet sponsored by the Panama City Military Affairs Committee and the American Fighter Aces.

Interceptor



Aerospace Defense Command Lt Gen Thomas K. McGehee Commander

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I'm sorry that I missed seeing you at William Tell '72 in September. I hear that it was really exciting and that all you contestants did a superb job. I'm very proud of you. This is my last appearance as Miss INTER-CEPTOR 1972. It has been a wonderful year and I've so enjoyed being in your unit each month. You'll meet the new Miss INTER-CEPTOR in the next issue and I hope you treat her as nicely as you have me. I can think of no better way of saying farewell than to present and congratulate the winners of William Tell '72.

You're all terrific! Best wishes for continued success.

Carolyn

RICHARD I. BONG TROPHY (Overall Category Winners)

F-101 119th Fighter Group, NDANG Hector Field, Fargo, ND

F-102 115th Fighter Group, WIANG Truax Field, Madison, WI

F-106 460th Fighter Interceptor Squadron Grand Forks AFB, ND

THOMAS K. MCGEHEE TROPHY (Top Gun Award)

Captains L. Butters and D. Danko 425 AW(F) Sq, Canada CFB Bagotville, Quebec

WEAPONS DIRECTOR WINNERS

F-101 101st Fighter Group, MEANG 765 ADG, Charleston AFS, ME

F-102 57th Fighter Interceptor Squadron 932 AC&W Sq, Rockville, Iceland

F-106 318th Fighter Interceptor Squadron 25 AD, McChord AFB, WA

WEAPONS LOADING WINNERS

F-101 119th Fighter Group, ND ANG Hector Field, Fargo, ND

F-102 57th Fighter Interceptor Squadron Keflavik NS, Iceland

F-106 318th Fighter Interceptor Squadron McChord AFB, WA